

IN THE CLAIMS

Please amend the claims as follows. This listing replaces all prior versions.

1. (Currently amended) A method for determining active plasminogen activator inhibitor-Type 1 (PAI-1) in a biological fluid, ~~the method comprising the steps of:~~

- ~~(i) providing a sample of a biological fluid selected from the group consisting of whole blood, platelet releasates, platelet plasma, plasma, serum, and a combination of same;~~
- (ii) measuring the amount of active PAI-1/multimeric vitronectin complex in a the sample of the biological fluid to determine; and
- ~~(iii) determining the amount of active PAI-1 in the biological fluid by correlating said amount to the amount of active PAI-1/multimeric vitronectin complex in the sample.~~

2. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

- (a) contacting the sample either simultaneously or stepwise with a first antibody which binds selectively to PAI-1 and a labelled second antibody which binds selectively to multimeric vitronectin; and
- (b) determining the second antibody bound to the complex to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

3. (Currently amended) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

- (a) contacting the sample either simultaneously or stepwise with a first antibody which binds selectively to multimeric vitronectin and a ~~labeled~~ labelled second antibody which binds selectively to PAI-1; and
- (b) determining the second antibody bound to the complex to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

4. (Currently amended) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

(a) contacting the sample either simultaneously or stepwise with a first antibody which binds selectively to PAI-1 and a ~~labeled~~ ~~labelled~~ second antibody which binds selectively to multimeric vitronectin to form a PAI-1/multimeric vitronectin/first antibody/second antibody complex;

(b) separating ~~the said~~ PAI-1/multimeric vitronectin/first antibody/second antibody complex ~~formed in step (a)~~ from the sample; and

(c) determining the second antibody bound to the complex to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

5. (Currently amended) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

a) contacting the sample either simultaneously or stepwise with a first antibody which binds selectively to multimeric vitronectin and a labelled second antibody which binds selectively to PAI-1 to form an active PAI-1/multimeric vitronectin/first antibody/second antibody complex;

(b) separating ~~the said active~~ PAI-1/multimeric vitronectin/first antibody/second antibody complex ~~formed in step (a)~~ from the sample; and

(c) determining the second antibody bound to the complex to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

6. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

(a) simultaneously contacting the sample with a first antibody which binds selectively to PAI-1, the first antibody being immobilized on a solid support, and with a labelled second antibody which binds selectively to multimeric vitronectin; and

(b) determining the second antibody bound to the solid support to measure the amount of

PAI-1/multimeric vitronectin complex in the sample.

7. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

- (a) contacting the sample with a first antibody which binds selectively to PAI-1, the first antibody being immobilized on a solid support;
- (b) contacting the solid support with a labelled second antibody which binds selectively to multimeric vitronectin; and
- (c) determining the second antibody bound to the solid support to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

8. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

- (a) simultaneously contacting the sample with a first antibody which binds selectively to multimeric vitronectin, the first antibody being immobilized on a solid support, and with a labelled second antibody which binds selectively to PAI-1; and
- (b) determining the second antibody bound to the solid support to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

9. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

- (a) contacting the sample with a first antibody which binds selectively to multimeric vitronectin, the first antibody being immobilized on a solid support;
- (b) contacting the solid support with a labelled second antibody which binds selectively to PAI-1; and
- (c) determining the second antibody bound to the solid support to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

10. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

(a) contacting the sample with a first antibody which binds selectively to PAI-1, the first antibody being immobilized on a solid support;

(b) contacting the solid support with a second antibody which binds selectively to multimeric vitronectin;

(c) contacting the solid support with a labelled third antibody which binds selectively to the second antibody; and

(d) determining the third antibody bound to the solid support to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

11. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

(a) contacting the sample with a first antibody which binds selectively to multimeric vitronectin, the first antibody being immobilized on a solid support;

(b) contacting the solid support with a second antibody which binds selectively to PAI-1;

(c) contacting the solid support with a labelled third antibody which binds selectively to the second antibody; and

(d) determining the third antibody bound to the solid support to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

12. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

(a) contacting the sample, either simultaneously or stepwise, with a first antibody which binds selectively to PAI-1 and to which is attached one member of a capture pair and with a labelled second antibody which binds selectively to multimeric vitronectin to form a mixture;

(b) contacting the mixture with a solid support on which is immobilized the other member of the capture pair; and

(c) determining the second antibody bound to the solid support to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

13. (Previously presented) The method of claim 1, wherein measuring the amount of PAI-1/multimeric vitronectin complex in the sample comprises:

(a) contacting the sample either simultaneously or stepwise, with a first antibody which binds selectively to multimeric vitronectin and to which is attached one member of a capture pair and with a labelled second antibody which binds selectively to PAI-1 to form a mixture;

(b) contacting the mixture with a solid support on which is immobilized the other member of the capture pair; and

(c) determining the second antibody bound to the solid support to measure the amount of PAI-1/multimeric vitronectin complex in the sample.

14-15. (Canceled).

16. (Previously presented) The method according to claim 3, wherein the second antibody is labelled with a directly detectable label.

17. (Previously presented) The method according to claim 3, wherein the second antibody is labelled with a component of a signal-generating system.

18. (Previously presented) The method of claim 17 wherein the component is an enzyme selected from the group consisting of alkaline phosphatase, amylase, luciferase, catalase, beta-galactosidase, glucose oxidase, glucose-6-phosphate dehydrogenase, hexokinase, horseradish peroxidase, lactamase, urease and malate dehydrogenase.

19. (Previously presented) The method according to claim 3, wherein the second antibody is labelled with a fluorophore.

20. (Original) The method of claim 19 wherein the fluorophore is selected from the group consisting of a coumarin, a rare earth metal ion, chelate or chelate complex, a fluorescein, rhodamine and a rhodamine derivative.

21. (Currently amended) The method of claim 3, wherein the second antibody is ~~labeled~~ labelled with a luminescent material.

22. (Original) The method of claim 21 wherein the luminescent material is selected from the group consisting of a cyclic diacyl hydrazide, luminol, isoluminol, an acridinium ester, a pyridopyridazine, a dioxerane, a bioluminescent protein and a luciferase.

23. (Currently amended) The method of claim ~~1~~ 3, wherein the second antibody is labelled with a label selected from the group consisting of a metal complex, a stable free radical, a vesicle, a liposome, a colloidal particle, a latex particle, a spin label, ~~and biotin/avidin biotin~~ and avidin.

24. (Previously presented) The method of claim 6, wherein the solid support is selected from the group consisting of an ELISA plate, a polyacrylamide matrix, a polystyrene tube, polystyrene beads, latex particles, paramagnetic particles, acrylic particles and gelatin particles.

25. (Withdrawn) A kit for determining active PAI-1 in a biological fluid comprising:

- (a) a first antibody which binds selectively to PAI-1; and
- (b) a labelled second antibody which binds selectively to multimeric vitronectin.

26. (Withdrawn) A kit for determining active PAI-1 in a biological fluid comprising:

- (a) a first antibody which binds selectively to multimeric vitronectin; and
- (b) a labelled second antibody which binds selectively to PAI-1.

27. (Withdrawn) The kit of claim 25 wherein said first antibody is immobilized on a solid support.

28. (Withdrawn) The kit of claim 25 further comprising a set of calibration standards.

29. (Withdrawn) A kit for determining active PAI-1 in a biological fluid comprising:

- (a) a first antibody which binds selectively to PAI-1;
- (b) a second antibody which binds selectively to multimeric vitronectin; and
- (c) a labelled third antibody which binds selectively to said second antibody.

30. (Withdrawn) The kit of claim 29 wherein said first antibody is immobilized on a solid support.

31. (Withdrawn) The kit of claim 29 further comprising a set of calibration standards.

32. (Withdrawn) The kit of claim 26 wherein said first antibody is immobilized on a solid support.

33. (Withdrawn) The kit of claim 26 further comprising a set of calibration standards.